

2008 Paper 5 Question 1

Software Engineering

How do software engineering tools change as systems scale? Discuss this question with reference to

- (a) a 2000-line device driver for a safety-critical sensor on board an aircraft;
- (b) a 100,000-line engine control unit for a diesel engine that adapts it for use in trucks, generators or irrigation pumps;
- (c) a 1,000,000-line social networking site such as Facebook or MySpace;
- (d) a 50,000,000-line operating system.

[20 marks]